

**RESPONSES TO PUBLIC COMMENTS ON THE
SPENCER HOT SPRINGS GEOTHERMAL LEASING EA**

Comment Letter	Letter Date	Commentor (Entity)	Comment Number	Summary of Comment	Response to Comment
1	11/02/2004	Franklin B. Whitman (Public)	1-1	Requests that livestock watering and recreational use of the hot springs be continued in the area. Recommends that a 160-acre area be reserved for recreation around the hot springs.	<p>The EA discusses livestock use of the area and provides stipulations to ensure the availability of water for livestock watering if geothermal activities should impact existing sources of water in the area (p.40). No change to the EA was required.</p> <p>The EA describes how the production of geothermal resources, road dust, visibility of geothermal equipment and facilities, and noise from geothermal activities could adversely affect recreational users of the hot springs (p.44).</p> <p>The EA discusses how the prescriptive general stipulations, which are part of the Proposed Action, would protect the flow and character of the Spencer Hot Springs by requiring the appropriate level of monitoring of the hydrologic system during all geothermal lease operations and preventing or correcting anything more than a negligible change in the flow or temperature of the springs (p. 14-15). Stipulations are prescribed in the EA that would be implemented to reduce air quality (p.11) and evaluate visual resource (p.42) impacts on a project-specific basis. In addition, the EA describes how noise from geothermal utilization activities could adversely affect recreational users of the hot springs, and as such, a stipulation is provided that would require that noise from geothermal utilization, as measured at the hot springs, be restricted to 45 dBA, a sound level that approaches background levels (p.45). As stated in the EA, this would likely result in an approximately 0.6 mile (or 695-acre) noise buffer for utilization facilities around the springs unless more sophisticated noise control measures can be achieved. No change to the EA was required.</p>

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2	11/02/2004	Don D. Canfield III (Nevada Division of State Lands)	2-1	Requests that a balance between energy development and recreational and natural resources. Advises that the springs have historical, cultural, and traditional significance as well as current dispersed recreational uses.	The comment regarding the balance between development and resources is noted. The EA discusses both the historical, cultural and traditional (p. 18-19) and recreational (p. 43) uses of the springs. No change to the EA was required.
			2-2	Advises that Lander County is seeking a Recreation or Public Purpose (RPP) lease around the springs and expresses concern that there are no stated stipulations in the Recreation section of the EA.	The EA discusses the pending Lander County request for an RPP lease (p.43). The geothermal lease stipulations presented in Appendix B are the general stipulations reproduced from the programmatic leasing EA. The proposed additional stipulation presented in the Recreation Section of the current EA ensures that recreation at the hot springs is not affected by noise. See also the Response to Comment 1-1. No change to the EA was required.
			2-3	States that the EA is deficient for not providing mitigation measures that would address use of the pending RPP lease and advises that geothermal activities could have a detrimental effect on potential recreational users being sought to be attracted to the area by the County.	The response to Comment 1-1 documents how the general and specific stipulations presented in the EA would protect recreational users of the hot springs. No change to the EA was required.
			2-4	Suggests that geothermal activities should be limited to an area outside of a recreational buffer area around the springs. The size of the recreational buffer should be negotiated through a public process. Alternatively, commentor suggests that only a portion of the pending geothermal lease area be issued geothermal leases.	The response to Comment 1-1, which documents how the general and specific stipulations would allow the development of the geothermal resources while protecting the recreational value of the hot springs. No change to the EA was required.

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3	11/22/2004	James D. Morefield (Nevada Department of Conservation & Natural Resources, Nevada Natural Heritage Program)	3-1	Requests that Palmer penstemon (<i>Penstemon palmeri</i>) be removed from all reclamation seed mixes in as proposed in Appendix D of the EA, and that this species not be planted in or near the Project area. It is requested because commercially available Palmer penstemon is the variety native to southern and eastern Nevada (<i>Penstemon palmeri</i> var. <i>palmeri</i>), and another variety, Lahontan beardtongue (<i>Penstemon palmeri</i> var. <i>macranthus</i>) that is much rarer, grows naturally in Churchill, Pershing, Nye, and possibly Lander and Eureka counties. This Nevada endemic is on the BLM Sensitive Species List, due to its rarity, and also because it is vulnerable to hybridization with the common variety (var. <i>palmeri</i>) when the latter is planted outside its native area. It is generally requested that commercially available Palmer penstemon not be planted in Nevada outside its native range (Clark, southern Nye, Lincoln, White Pine, and southern Elko counties). This will help minimize swamping of var. <i>macranthus</i> genes by var. <i>palmeri</i> genes, which could lead to endangerment of the endemic var. <i>macranthus</i> .	The comment regarding the use of Palmer penstemon (<i>Penstemon palmeri</i> var. <i>palmeri</i>) is noted. Appendix D to the EA was changed to delete the use of Palmer penstemon (<i>Penstemon palmeri</i> var. <i>palmeri</i>) from among the suggested reclamation seed mixes.
4	11/16/2004	Brenda Johnson (US Geological Survey, Office of Environmental Affairs)	4-1	States that the EA was reviewed USGS Office of Environmental Affairs has no comments	Comment noted. No change to EA was required.
5	11/21/2004	Philip Williams (Greater Austin Chamber of Commerce)	5-1	States that Spencer Hot Springs has historically been an important way point for travelers. The residents of Austin and Great Smoky Valley and modern-day tourists currently enjoy the Springs and are largely responsible for the recreational improvements to the Springs area.	The response to Comment 2-1 describes how EA addresses the historic and cultural value of the Springs area and the current recreational use of the Springs. No change to the EA was required.

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			5-2	States that while the residents are in favor of alternative energy development, they also want the Hot Springs preserved. Suggests that a 160-acre area around the Springs not be included in a geothermal lease or that a “No Surface Occupancy” stipulation be applied to a 160-acre area around the Springs.	The response to Comment 1-1 describes how the existing general stipulation and proposed noise mitigation stipulation in EA would serve to prevent development in close proximity to the Springs. No change to the EA was required.
			5-3	Advises that the Chamber of Commerce is working with the Lander Board of Commissioners to develop a plan for public and safe use of the Springs and acquiring the Spencer Hot Springs property from the BLM.	The response to Comment 2-2 describes how the EA addresses the pending potential RPP lease to Lander County. The proposed additional stipulation presented in the Recreation Section of the current EA ensures that recreation at the hot springs is not affected by noise. See also the Response to Comment 1-1. No change to the EA was required.
			5-4	States that the Spencer Hot Springs area is part of a broad “economic development” plan initiated by the Chamber that includes other Federal outdoor physical recreation attractions and facilities.	The Socioeconomics section of the EA (p. 45) describes the existing recreational attraction value of the Spencer Hot Springs that bring recreational tourists to the area that make purchases which contribute to the local economy. It also discusses how job opportunities and associated economic development would be associated with geothermal development, and notes that the economic benefits of geothermal development could be partially offset if there is diminished recreational use of the area. The measures described in response to Comment 1-1 would also mitigate potential impacts on recreational users of the Springs area. No change to the EA was required.

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6	11/22/2004	Hy Forgeron, Esq. (Lander County District Attorney)	6-1	States that the Lander County Board of Commissioners voted that the Spencer Hot Springs area itself be excluded from the overall proposed geothermal lease. It is also suggested that the relatively small area around the Springs should not unduly affect the potential geothermal development in the area.	The response to Comments 2-1 discusses how the EA addresses that a balance between energy development and recreation is needed. The responses to Comments 1-1 and 2-4 discuss how the EA addresses how the prescriptive general stipulations and the proposed noise stipulation would result limit potential development in close proximity to the Hot Springs area to avoid conflicts with recreational users of the springs. No change to the EA was required
7	11/22/2004	Ray Williams (Lander County Public Lands Advisory Committee)	7-1	Requests that consideration be given to residents and traveling public that have historically used the Springs area for 160 years. Notes that Native Americans have historically used the area. Also, notes that in addition to bathing, the Springs area has historically been used for grazing, livestock and wildlife watering, mining, wildlife viewing, and has been an area providing opportunity for solitude and meditation.	The EA identifies the historical uses of the Spencer Hot Springs area, including Native American use (p.21), mining (p.16), grazing (p.39), dispersed recreational activities (p.43), livestock and wildlife watering (p.31 and p.39, respectively). The response to Comment 2-1 discusses how the EA addresses that a balance between energy development and recreation is needed. No change to the EA was required
			7-2	Notes that four letters were submitted to the BLM during the formal environmental scoping period for the proposed Project. Suggests that it is a legal requirement that the EA include these letters.	The EA provides a summary of all verbal and written comments received by the BLM during public scoping during the preparation of the EA (p.4), and the EA addresses each of the issues identified during scoping. The scoping records are maintained and available for public review at the BLM Battle Mountain Field Office. There is no legal requirement that the EA contain copies of the written scoping comments. No change to the EA was required.

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			7-3	States that the advisory commission recognizes the economic benefits of an alternative energy development. Recommends that a set aside from the proposed geothermal lease area of 160 acres or more be established for traditional uses around Spencer Hot Springs and the associated wells.	The response to Comment 1-1 discusses how the prescriptive general stipulations and the stipulation provide for noise described in the EA would afford protection of the existing uses of the Spencer Hot Springs area and provide a buffer from geothermal development around the springs. The response to Comment 2-1 also discusses how the EA addresses that a balance between energy development and recreation is needed. No change to the EA was required.
8	11/18/2004	Don D. Canfield III, AICP (Senior Planner, Nevada Department of Conservation and Natural Resources, Division of State Lands)	8-1	Same as Comment 2-1	Same as response to Comment 2-1
			8-2	Same as Comment 2-2	Same as response to Comment 2-2
			8-3	Same as Comment 2-3	Same as response to Comment 2-3
			8-4	Same as Comment 2-4	Same as response to Comment 2-4
9	11/26/2004	Tom Gallagher (Nevada Department of Conservation and Natural Resources, Division of Water Resources)	9-1	States that all waters of the State must be appropriated by Nevada Revised Statutes (NRS), and that all drilling water and/or dust control water shall be pursuant to a permit or waiver from the state engineer. Also states that a waiver from the state engineer may be granted to drill a temporary water source well to support geothermal drilling operations. States that all boreholes and wells must be plugged and abandoned in conformance with Nevada Administrative Code, and if flowing water is encountered, it must be controlled as required by NRS. Also states that the state engineer supports the geothermal lease stipulations set forth in the text of the EA and Appendix B.	The EA states in multiple locations (e.g., p.2, p.5, p.6, p.7, etc.) that the BLM will require compliance with all federal, state, and local laws and regulations. The hydrologic resources section of the EA discusses the role of the Nevada State Engineer and his authority for administration of the ground water resources in the basin (p.12). The statutory and regulatory citations are noted. No change to the EA was required.

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10	11/23/2004	Katie Fite (Western Watersheds Projects)	10-1	States that the EA fails to conduct an adequate analysis of the balance of values between energy development and other resources; fails to accurately calculate the amount of energy that could be produced; and does not reveal the true magnitude of visual, aural, and olfactory disturbance that may result from the implementation of the project.	The EA addresses the balance between energy development and other resources such as recreation (see responses to Comments 2-1 and 6-1). Estimates of potential geothermal energy development in the Spencer Hot Springs area are based on available information and are provided in Appendix A of the EA. These estimates were used to assess the potential indirect effects of geothermal leasing in each of the environmental consequence sections throughout the EA. The indirect effects of leasing on visual resources are evaluated in Section 3.3.9; from noise (aural) in Section 3.3.10; and odors (olfactory) from hydrogen sulfide in Section 3.3.1. No change to the EA was required.
			10-2	States concern that an EIS was not prepared to address the direct, indirect and cumulative effects of the project on multiple resources of Spencer Hot Springs and the surrounding area.	The determination as to whether an Environmental Impact Statement (EIS) will be required is made at the time of the decision on the proposed Project. The direct, indirect, and cumulative effects of the Project were evaluated in Section 3.5 of the EA. No change to the EA was required.
			10-3	States that there are serious concerns from all aspects of geothermal exploration and development. Suggests that exploration may involve cross-country driving that could cause disturbance and spreading of weeds and could entail underground explosions that could dry up surface waters, or the construction of roads.	The EA describes the anticipated geothermal exploration and development activities in Appendix A. Casual use activities are expected to occur along existing roads or by walking across areas without existing roads. The construction of new roads during geothermal exploration and development activities are also described and the environmental consequences of new road construction and road use are evaluated in each of the resource sections. The effects of the project on the spread of weeds from surface disturbance are evaluated in Section 3.3.7 of the EA. No underground explosions that could affect surface waters are anticipated from the Project. No change to the EA was required.

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			10-4	States that a complete study of the geothermal aquifer and neighboring geothermal aquifers must be presented to assess the feasibility of any action. States that the study must also examine the relationship between this project and aquifer depletion that could result from legislation that authorizes water export and aquifer mining in neighboring Lincoln County and other neighboring geothermal aquifers. States that White Pine County may also legislate aquifer mining and inquires how underground water at Spencer Hot Springs relates to ground water in White Pine County.	The EA evaluates the effects of the Project on hydrologic resources in Section 3.3.2. BLM did not undertake any new studies of the ground water or geothermal aquifers for this EA, and the EA was amended to state this. However, the EA did state that enough information was available to state that the aquifers were likely separate and that geothermal development would not likely draw down the shallow ground water table. No substantial geothermal aquifers are known to neighbor the Spencer Hot Springs resource. There is no reason to expect any relationship between the geothermal fluid aquifer in the Spencer Hot Springs area and the water resource aquifers in either Lincoln County (located over 100 miles to the southeast) or White Pine County (located over 50 miles to the east). No other changes to the EA were required.
			10-5	Inquires what water rights may be affected by de-watering of the Spencer site.	The EA addresses the potential indirect effects of geothermal leasing on Spencer Hot Springs (Section 3.3.2). The EA states that although it is possible that geothermal fluid production and utilization could reduce or eliminate the flow from Spencer Hot Springs, the prescriptive general stipulations included as part of the leasing decision would protect the flow of the springs. The water rights applicable to the area are listed in Appendix E and Figure 5 of the EA and summarized in the text of the assessment (p.13). No change to the EA was required.
			10-6	Inquires if geothermal development would dry up the surface hot spring flow.	The response to Comment 10-5 documents how the prescriptive general stipulations included as part of the leasing decision would protect the flow of the springs. No change to the EA was required.

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			10-7	Inquires what the stratigraphy of the area is. Also inquires if drilling to access or inject geothermal fluid will disturb soil layers and stratigraphy and alter surface flow.	The EA discusses the soils in the area and addresses the potential indirect effects of geothermal leasing on these soils, including disturbance associated with construction of drill pads (Section 3.3.3.2). Although it is unlikely that drilling, or geothermal fluid production or injection, could alter surface water flow, the EA states that the prescriptive general stipulations included as part of the leasing decision would protect any surface water flows. No change to the EA was required.
			10-8	Inquires if the hot water aquifer at Spencer Hot Springs is related to the geothermal near Battle Mountain. Also inquires how cyanide heap leach gold mining, oil drilling, and other extraction activities affect Spencer Hot Springs. Inquires what other new projects will occur and what the cumulative effects will be with the project. Inquires what other drilling or development may be planned.	The geothermal system reported near Battle Mountain (approximately 90 miles to the north) is not likely related to the Spencer Hot Springs geothermal system, and any operations conducted there would not affect Spencer Hot Springs. Section 3.5 of the EA presents the existing, proposed and reasonably foreseeable actions which may affect the Spencer Hot Springs leasing area and the direct, indirect, and cumulative effects of these projects. No change to the EA was required.
			10-9	Inquires what surface or ground water pollution will result from geothermal development in the project area.	The EA addresses the potential indirect effects of geothermal leasing on the surface and ground waters of the area (Section 3.3.2). No change to the EA was required.

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			10-10	Inquires what aquatic and terrestrial biota are present and how will they be affected by the project. Also inquires what wildlife species use the geothermal water at Spencer Hot Springs and how the project will affect these species.	The EA addresses the effects of the Project on biological resources (Section 3.3.5) including special status species (Section 3.3.5.1). The EA discusses that site-specific surveys for special status species will be required for proposed geothermal activities with the potential for surface disturbance (p.26), with the requirement for avoidance or mitigation of potential adverse effects. Multiple species may utilize the water of Spencer Hot Springs, but both prescriptive general stipulations and wildlife-specific stipulations are set forth in the EA to protect wildlife from the potential indirect effects of leasing on Spencer Hot Springs and other water resources (p.32). No change to the EA was required.
			10-11	States concern that necessary monitoring and mitigation measures are not included and that no requirement is made for a bond sufficient to cover environmental damages.	The EA provides both prescriptive general stipulations and resources-specific stipulations as the need was identified by the analysis for monitoring and mitigation of potential indirect adverse effects from geothermal leasing. Regulations (43 CFR 3214 <i>et seq.</i>) require that the geothermal lessee or operator must post a bond with the BLM that covers exploration drilling, geothermal utilization, or related activities on a federal geothermal lease. This bond is intended to cover plugging and abandonment of wells and reclaiming the lease area, as necessary, and the bond amount can be increased to cover the estimated reclamation costs. No change to the EA was required.

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			10-12	States concern that the impacts of powerlines, building infrastructure, road improvement and other things associated with the project (e.g., surface disturbance on weed invasion and spread, and powerline effects on bird and animal populations) have not been analyzed in the EA.	Appendix A to the EA discusses the existing transmission line that crosses through the Project area (p.5) and the likely requirement for construction of an approximately two-mile interconnection line. Appendix A also describes the infrastructure and roads that may be required for geothermal exploration, power plant development, and direct geothermal utilization development that could occur in the Project area. Section 3.3.7 of EA covers the potential effects of geothermal exploration or development activities on invasive nonnative weed species. The EA evaluates the potential indirect effects of geothermal leasing on biological resources, including special status species (Section 3.3.5.1), wildlife (Section 3.3.5.4), and migratory birds (Section 3.3.5.5). Further site-specific impact analysis will be required under NEPA for the potential direct effects of any proposed geothermal exploration or development operation that may be proposed if geothermal leases are issued in the Project area. No change to the EA was required.
			10-13	States the EA only projected favorable geothermal exploration and development predictions and requests that a risk analysis be conducted to examine the worst-case scenario.	Appendix A to the EA provides reasonable projections of the geothermal exploration and development potential of the Spencer Hot Springs area. CEQ and BLM guidance for NEPA analyses no longer support an analysis of the "worst-case scenario." Instead, the EA analyses the reasonably foreseeable scenario. No change to the EA was required.